

Appln. Serial No. 09/752,018  
Filed December 28, 2000  
Amendment of March 9, 2004

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently Amended) An electrodeless low-pressure discharge lamp comprising:
  - a discharge vessel enclosing a gas-tight discharge cavity containing an ionizable fill, the discharge vessel having a light-transmitting bulb portion and a reentrant tube protruding into the discharge cavity, the bulb portion and the reentrant tube each having a surface facing to the discharge cavity;
  - a means arranged at least partially in the reentrant tube for exciting discharge in the ionizable fill;
  - an UV-to-visible-converting layer applied only to said surface of the bulb portion; and
  - an UV reflecting layer applied to said surface of the reentrant tube, said surface of the bulb portion being free of said UV reflecting layer.
2. (Original) The electrodeless low-pressure discharge lamp of claim 1 in which the means for exciting discharge in the ionizable fill comprises a supply electronics surrounded by a housing and connected to a coil.
3. (Original) The electrodeless low-pressure discharge lamp of claim 1 in which the UV-to-visible-converting layer comprises at least one phosphor layer activated by at least one rare earth element.
4. (Original) The electrodeless low-pressure discharge lamp of claim 1 in which the UV reflecting layer is made of one of the compounds belonging to the group of  $Al_2O_3$ , anatase  $TiO_2$ ,  $Y_2O_3$ ,  $La_2O_3$ ,  $MgO$ ,  $SiO_2$ , aluminum-silicate and  $CaP_2O_7$ .
5. (Original) The electrodeless low-pressure discharge lamp of claim 1 in which the UV reflecting layer has a coating weight resulting in a reflection coefficient of at least 0.7.

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6. (Original) The electrodeless low-pressure discharge lamp of claim 5 in which the UV reflecting layer has a coating weight resulting in a reflection coefficient of at least 0.9.
- 5 7. (Original) The electrodeless low-pressure discharge lamp of claim 1 in which the ionizable fill comprises mercury and an inert gas, the UV-to-visible-converting layer is a tri-phosphor layer and the UV reflecting layer is of aluminum oxide with a coating weight of 4.5 mg/cm<sup>2</sup>.
- 10 8. (New) An electrodeless low-pressure discharge lamp comprising a discharge vessel enclosing a gas-tight discharge cavity containing an ionizable fill, the discharge vessel having a light-transmitting bulb portion and a reentrant tube protruding into the discharge cavity, the bulb portion and the reentrant tube each having a surface facing to the discharge cavity;  
15 a means arranged at least partially in the reentrant tube for exciting discharge in the ionizable fill;  
an UV-to-visible-converting layer applied to said surface of the bulb portion;  
and  
an UV reflecting layer applied to said surface of the reentrant tube, said  
20 surface of the reentrant tube being free of said UV-to-visible-converting layer.
- 25 9. (New) The electrodeless low-pressure discharge lamp of claim 8 in which the means for exciting discharge in the ionizable fill comprises a supply electronics surrounded by a housing and connected to a coil.
- 30 10. (New) The electrodeless low-pressure discharge lamp of claim 8 in which the UV-to-visible-converting layer comprises at least one phosphor layer activated by at least one rare earth element.
- 35 11. (New) The electrodeless low-pressure discharge lamp of claim 8 in which the UV reflecting layer is made of one of the compounds belonging to the group of Al<sub>2</sub>O<sub>3</sub>, anatase TiO<sub>2</sub>, Y<sub>2</sub>O<sub>3</sub>, La<sub>2</sub>O<sub>3</sub>, MgO, SiO<sub>2</sub>, aluminum-silicate and CaP<sub>2</sub>O<sub>7</sub>.
12. (New) The electrodeless low-pressure discharge lamp of claim 8 in which the UV reflecting layer has a coating weight resulting in a reflection coefficient of at least 0.7.

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13. (New) The electrodeless low-pressure discharge lamp of claim 12 in which the UV reflecting layer has a coating weight resulting in a reflection coefficient of at least 0.9.

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14. (New) The electrodeless low-pressure discharge lamp of claim 8 in which the ionizable fill comprises mercury and an inert gas, the UV-to-visible-converting layer is a tri-phosphor layer and the UV reflecting layer is of aluminum oxide with a coating weight of 4.5 mg/cm<sup>2</sup>.

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